5. Hindsight is 20/20

Program Name: Hindsight.java Input File: hindsight.dat

Everyone knows that hindsight is 20/20. Ethan is studying some stock trends in hopes of gaining some insight into how to buy and sell stocks to make a maximum profit. Ideally, a person's maximum profit is determined by buying a stock on the day the price of the stock is as low as possible and then selling that stock when the price is as high as possible. However, if the price of the stock never increases after he buys the stock, his profit would be zero, or even worse if the price decreases.

You will be given a list of prices of a particular stock every day for two weeks. You will write a program that will print the maximum amount Ethan could earn in profit for the given two weeks. If he could not sell for a profit, he will not sell the stock at all, so his profit would be zero (0).

Input

The first line of input will contain a single integer n that indicates the number of stocks to follow. Each of the following n lines will contain 14 integers separated by a space. Each integer will represent the price of the stock on days 1 through 14.

Output

For each stock, you will print the maximum amount Ethan could earn in profit for the given two weeks or zero(0) if he could not make a profit.

Example Input File

3 10 15 12 16 12 15 18 12 10 8 4 13 12 8 5 8 12 13 4 6 12 9 8 7 12 15 12 16 12 12 12 11 11 11 10 10 10 10 9 9 8 7

Example Output to Screen

9 12 0